

REMARKS

Claims 1-5 and 7-21 are pending in the present application. Claim 8 has been amended. Claims 1, 8, and 13 are independent claims. The Examiner is respectfully requested to reconsider the rejection in view of the above amendments and the following remarks.

Allowable Subject Matter

It is gratefully acknowledged that the Examiner has allowed claims 1-5, 7, and 12-21.

Telephonic Interview of February 28, 2008

Applicants wish to thank Examiner Lun-See Lao for taking the time to discuss the present application with Applicants' representative, Jason Rhodes (Reg. No. 47,305), during the telephonic interview of February 28, 2008 in connection with the above application.

Claim Discussed: Independent claim 8.

Prior Art Discussed: Tsuji (JP 11-186924).

Proposed Amendment: Applicants' representative had transmitted by facsimile a proposed amendment of claim 8 to the Examiner for his review before the interview. Claim 8 has been amended above according to the proposed amendment.

General Results: Without conceding the validity of the current ground of rejection, Applicants' representative presented the proposed amendment in an effort to expedite prosecution. However, no agreement was reached during the interview as to whether the proposed amendment would place claim 8 in condition for allowance. The Examiner stated that Tsuji appears to teach the amended feature in that Tsuji's element 24 (Fig. 18) appears to switch between different techniques of noise correction based on a detected noise level. Applicants' representative disagreed with the Examiner's interpretation of Tsuji and presented arguments. The Examiner said that Applicants should file their arguments in the next response.

Rejection Under 35 U.S.C. § 103

Claims 8-11 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 4,727,580 to Sakai (hereafter “Sakai”) in view of Japanese patent publication No. JP 11-186924 to Tsuji (hereafter Tsuji). This rejection is respectfully traversed.

Proposed Combination of Sakai and Tsuji is Improper

Initially, Applicants respectfully refer the Examiner to MPEP § 2143.01.VI, which states:

If the proposed modification or combination of the prior art will change the principle of operation of the prior art invention being modified, then the teachings of the references are not sufficient to render the claims *prima facie* obvious. *In re Ratti*, 270 F.2d 810, 123 USPQ 349 (CCPA 1959).

The principle of operation in Sakai’s receiver is to eliminate noise in the audio signal before the audio signal is demodulated into separate channels. See Sakai at Fig. 1 and col. 2, lines 52-66. However, the Examiner proposes to modify Sakai to incorporate Tsuji’s teaching of a corrector which receives the left and right channel signals outputted from the stereo demodulator, and independently corrects the noise in each channel (see Office Action at page 3). Applicants respectfully submit that this proposed modification would require a rearrangement of the basic elements of Sakai’s receiver illustrated in Fig. 1, thus changing the principle of operation of such receiver.

Since the Examiner’s proposed modification would change the principle of operation in Sakai’s invention, Applicants submit that this modification is improper under § 103.

Further, Applicants respectfully submit that the Examiner’s statement that the proposed modification of Sakai “would benefit from the ability to adjust to this temporal variation to reduce the noise” (Office Action at page 3, last paragraph) is insufficient to provide the necessary rational underpinning supporting a legal conclusion of obviousness. This statement

does not make it clear what “temporal variation” the Examiner is referring to, or what particular benefit is expected to be achieved by the proposed modification.

In view of the foregoing, Applicants submit that the Examiner’s proposed combination of Sakai and Tsuji is insufficient to establish a *prima facie* case of obviousness under § 103.

Sakai and Tsuji Fail to Teach or Suggest Every Claimed Feature

While Applicants believe that the Examiner has failed to establish a *prima facie* case of obviousness as discussed above, Applicants have amended claim 8 in an effort to further distinguish over Sakai and Tsuji. Particularly, claim 8 has been amended to recite that the at least one corrector selects between different techniques for independently correcting the detected noise in each of the audio signals based on a detected level of a high band component in the audio signal. It is respectfully submitted that none of Sakai and Tsuji teaches or suggests this feature.

During the telephonic interview of February 28, 2008, the Examiner suggested that element 24 in Fig. 18 of Tsuji selects between different techniques for correcting detected noise. Particularly, the Examiner asserted that Tsuji’s element 24 switches between the outputs of elements 14 and 28 in Fig. 18 based on the detected noise level (from element 26), and that the outputs of elements 14 and 28 correspond to different techniques for correcting noise. Applicants respectfully disagree with this interpretation of Tsuji by the Examiner.

Applicants respectfully submit that Tsuji’s element 24 is a synthesis circuit¹ for combining the signals output from elements 14 and 28. Specifically, in Tsuji’s noise rejection circuit of Fig. 18, elements 13 and 14 generate a polynomial interpolation of the low-frequency component of the channel signal (see abstract; paragraphs 0019-20 and 0038). Meanwhile, elements 27 and 28 generate sine waves based on frequency analysis of the channel signal (see paragraph 0041-42). Paragraphs 0044-45 and Fig. 22 of the machine translation of Tsuji teach

¹ Some portions of machine translation of Tsuji use the term “synthetic circuit” to refer to element 24, even though the abstract more correctly refers to element 24 as a synthesis circuit.

that the synthesis circuit 24 compounds (i.e., combines) the interpolation signal (from element 14) with the signal from element 28 to be output as a substitute for the noise part of the channel signal. Further, paragraph 0033 of Tsuji describes element 24 as being an “adder-circuit” and thus a combining circuit, rather than a switch.

As such, Applicants respectfully submit that the Examiner’s proposed combination of Sakai and Tsuji fails to teach or suggest the claimed feature of selecting between different techniques for independently correcting the detected noise in each of the audio signals based on a detected level of a high band component in the audio signal. Thus, even assuming for the sake of argument that it is proper to combine Sakai and Tsuji (which Applicants do not admit), it is respectfully submitted that claim 8 is allowable because this combination fails to teach or suggest every claimed feature.

Claims 8-11 are Allowable

Applicants submit that claim 8 is allowable at least for the reasons set forth above, Accordingly, claims 9-11 are allowable at least by virtue of their dependency on claim 8. Therefore, the Examiner is respectfully requested to reconsider and withdraw this rejection.

Entry of Amendment After Final

Applicants respectfully request entry of this amendment in that it raises no new issues requiring further search and/or consideration. Particularly, the amendment of claim 8 merely adds a feature, which is similar to a feature already incorporated into independent claims 1 and 13. Thus, it is respectfully submitted that the issues raised by this amendment has already been the subject of search and consideration by the Examiner, and entry of this amendment is proper.

Conclusion

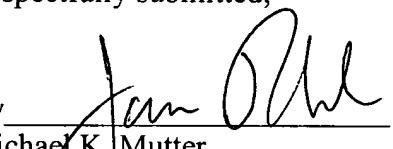
In view of the above amendments and remarks, the Examiner is respectfully requested to reconsider the outstanding rejection and issue a Notice of Allowance in the present application.

Should the Examiner believe that any outstanding matters remain in the present application, the Examiner is respectfully requested to contact Jason W. Rhodes (Reg. No. 47,305) at the telephone number of the undersigned to discuss the present application in an effort to expedite prosecution.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37 C.F.R. §§ 1.16 or 1.17; particularly, extension of time fees.

Dated: March 27, 2008

Respectfully submitted,

for By  #47,305
Michael K. Mutter
Registration No.: 29,680
BIRCH, STEWART, KOLASCH & BIRCH, LLP
8110 Gatehouse Road
Suite 100 East
P.O. Box 747
Falls Church, Virginia 22040-0747
(703) 205-8000
Attorney for Applicant